For the foregoing reasons, applicant believes that this case is in condition for allowance, which is respectfully requested. The Examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted

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By

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February 6, 2001
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The paragraph beginning on page 18, line 24 has been amended as follows:

In the NiP underlayer, a ratio (at%) of nickel (Ni) and phosphorus (P) constituting the underlayer may be varied depending upon the desired effects and other factors, however, it is particularly preferred that a ratio of Ni and P (Ni:P) be in the range of about 67 to 85:35 to 15. In other words, a content (concentration) of P in the NiP underlayer is preferably about 15 to 33 at%. The lower limit of the P concentration in the NiP underlayer is 15 at% at which the NiP underlayer can substantially show a non-magnetic property, since the NiP underlayer should have a non-magnetic property to avoid any problems in the magnetic recording. The NiP alloy may have different forms, and when the NiP alloy in the form of a crystalline body is considered, the NiP alloy with the highest P concentration is Ni_3P which is known to be a non-magnetic material. Further, it is also known that NiP can be in the form of an amorphous structure, if the P concentration is in the range of 15 to 26 at%. Note, in this connection, that the NiP layer in an amorphous form has substantially a non-magnetic property, but, if the P concentration is reduced to below 15 at%, a magnetic property is produced in the NiP layer as a result of deposition of a Ni layer. The upper limit of the P concentration in the NiP underlayer is 33 at%, because if the P concentration is increased to above 33 at%, there is no target NiP sufficient to satisfy the sputtering process. That is, the NiP target

material containing an increased amount of P is brittle and therefore it cannot be fabricated to a hard NiP target having a high purity.

In the Claims:

Please amend the claims as follows:

2. (Amended) The magnetic recording [medium] disk according to claim 1, in which said second underlayer has circumferentially distributed stripe-like ridges and grooves on a surface thereof.

3. (Amended) The magnetic recording [medium] disk according to claim 2, in which said second underlayer has a surface roughness Ra_1 in a circumferential direction of less than 1 nm and a surface roughness Ra_2 in a radial direction of less than 2 nm, and the roughness Ra_1 is smaller than the roughness Ra_2.

5. (Amended) The magnetic recording [medium] disk according to claim 1, in which said magnetic recording layer is constituted from a four-component metal alloy of cobalt, chromium, platinum and tantalum which is represented by the following formula:

$$Co_{bal.}\text{-}Cr_{14\text{-}22}\text{-}Pt_{4\text{-}10}\text{-}Ta_x$$

in which

bal. means a balance calculated by subtracting the sum of the atom% of the other elements from 100 [amount], and

x is [a] in the range of 1 to 5 at %.

6. (Amended) The magnetic recording [medium] disk according to claim 1, in which said magnetic recording layer is constituted from a five-component

metal alloy of cobalt, chromium, platinum, tantalum and niobium which is represented by the following formula:

$$Co_{bal.}\text{-}Cr_{14\text{-}22}\text{-}Pt_{4\text{-}10}\text{-}Ta_x\text{-}Nb_y$$

in which

bal. means a balance calculated by subtracting the sum of the atom % of the other elements from 100 [amount], and

[a] the sum of x and y (x + y) is in the range of 1 to 5 at %.

7. (Amended) The magnetic recording [medium] disk according to claim 6, in which an amount of the added tantalum and that of the added niobium in the five-component alloy are exactly or substantially the same as each other.

8. (Amended) The magnetic recording [medium] disk according to claim 1, in which said magnetic recording layer has a tBr value (product of a layer thickness t of the magnetic recording layer and its residual magnetic flux density Br) of 40 to 180 G.μm.

9. (Amended) The magnetic recording [medium] disk according to claim 1, [in which said underlayer has a three-layered structure] in which a thickness of the first underlayer is in the range of 5 to 25 nm, a thickness of the second underlayer is in the range of 10 to 200 nm, and a thickness of the third underlayer is in the range of 5 to 60 nm.

12. (Amended) The magnetic recording [medium] disk according to claim 1, which further comprises, applied over said magnetic recording layer, a protective layer consisting of carbon of diamondlike carbon.